DOI Work Activity 22: Plan for Water and Related Resource Use

Program Area:	Water and Power	
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner	
Intermediate Outcome Strategy:	UIO 5.2 - Effective Water Management to Optimize Supply	
DOI Sub process:	2a - Plan	

Examples/Notes:

Work Activity Description: Includes all general resource planning related to water management, such as basin-wide or area specific hydrology studies for:

Planning purposes versus studies for operational or environmental purposes

Resource studies

Resource management plans

Geographical Defined Programs (GDPs)

Technical assistance to States, tribes, and districts

Integrated Resource Plans (Rips)

Specific tasks may include: needs assessments, planning, resource identification, alternative development, public involvement, and environmental compliance. This activity **does not include** work to develop feasibility studies and plans to construct water storage, conveyance or Title XVI Reclamation and Reuse projects or facility modifications.

Output: Resource Plans Completed	Unit of Measure: Number of Resource Plans Completed. Count the number of plans completed in the reporting period. Resource Plans include plans of study, study reports (e.g., appraisal-level studies, needs assessments), RMPs, technical reports, and completed technical assistance activities.
Inputs: a) Labor, materials, contracts b) Standards or request from stakeholders	Cost Drivers: Complexity/size of issue or resource being addressed, extent of NEPA requirements, public and stakeholder involvement, acceptability

System Interfaces:

DOI Work Activity 4H: Operate Dams/Water Storage Facilities

Program Area:	Water and Power	
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner	
Intermediate Outcome Strategy:	UIO 5.1 - Operate and Maintain a Safe and Reliable Water Infrastructure	
DOI Sub process:	4c - Provide facilities	

Examples/Notes:

Work Activity Description: Includes all costs associated with operation of dams/water storage facilities. Operations include, but are not limited to: making and scheduling releases; developing standing operating procedures; training operators; monitoring instruments; measuring releases; preparing for dam emergencies, day-to-day management of facility grounds; and necessary environmental work directly related to ongoing operations of the facility.

Output: Dam/Reservoir Capacity Managed	Unit of Measure: Dam/Reservoir Acre-Feet Capacity. Dam/Reservoir Capacity": Active capacity extends from the top of the dead and inactive pools to the top of the Active, Joint Use, and Exclusive Flood Control Pools
Inputs: a) Labor, materials, equipment, and contracts b) Authorizing legislation to operate the facility to store water. Bureau policy to implement emergency management, provide SOPs, and conduct facility reviews.	Cost Drivers: Demand for water, large inflow events, watershed complexities, legal in-stream flow requirements, changes in operations staff, size of facility, quantity of instrumentation and monitoring frequencies.

System Interfaces:

DOI Work Activity 4J: Operate Conveyance Facilities

Program Area:	Water and Power	
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner	
Intermediate Outcome Strategy:	UIO 5.1 - Operate and Maintain a Safe and Reliable Water Infrastructure	
DOI Sub process:	4c - Provide facilities	

Examples/Notes:

Work Activity Description: Includes all costs associated with daily operation of conveyance facilities, including canals and well fields; laterals; waterways, including tunnels; and pumping plants. Operations include but are not limited to: controlling water flows; controlling treatment processes; developing operating procedures; training operators; monitoring instruments; preparing for emergencies; reviewing conveyance facilities and pumping plants for operation, maintenance, safety deficiencies; day-to-day management of facility grounds; necessary environmental work directly related to ongoing operations of the facility; work associated with repayment contracts, operations-related science and technology research, and facility security management (law enforcement, guards, etc..).

Output: Conveyance Facilities Operated	Unit of Measure: Number of Conveyance Facilities. Count the number of conveyance facilities, including canals and well fields; laterals; waterways, including tunnels; and pumping plants. This number should not change from year-to-year and can be used to show trends in costs
Inputs: a) Labor, materials, equipment, and contracts b) Authorizing legislation to operate the facility to store water. Bureau policy to implement emergency management, provide SOPs, and conduct facility reviews.	Cost Drivers: Demand for water (user orders), changes in operations staff, size/complexity of facility, and number of applicable hazards.

System Interfaces:

DOI Work Activity 4L: Reduce Dam Safety Risks

Program Area:	Water and Power	
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner	
Intermediate Outcome Strategy:	UIO 5.1 - Operate and Maintain a Safe and Reliable Water Infrastructure	
DOI Sub process:	4c - Provide facilities	

Examples/Notes:

Work Activity Description: This activity includes all work and costs to complete risk reductions, such as labor, materials, designs, award of necessary contracts, construction management and coordination. Includes all work under Safety of Dams Program, excluding work to inventory and assess risk to the downstream public, which is under Protect Lives and Property.

Output: Dam Safety Modifications or Actions to Reduce Risks	Unit of Measure: Number of Dam Safety Modification or Actions Completed. Completed Safety of Dams Modifications - Structural Safety of Dams Modifications will be considered complete once construction activities have been completed to the extent that the original intended risk reduction has been achieved. Therefore, Safety of Dams Modifications will be considered complete under the following conditions. 1. Structural Safety of Dams modifications associated with currently identified dams are completed. 2. The intended risk reduction for a currently identified dam is achieved by non-structural actions such as a reservoir restriction. 3. A decision is made that modifications to a currently identified dam are no longer considered necessary due to a change in the understanding of risk at that structure.
Inputs: a) Labor, materials, contracts b) Dam Safety decision	Cost Drivers: Scope of risk reduction

System Interfaces:

DOI Work Activity 8E: Manage Project Lands

Program Area:	Water and Power	
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner	
Intermediate Outcome Strategy:	UIO 5.2 - Effective Water Management to Optimize Supply	
DOI Sub process:	4d – Conserve resources	

Examples/Notes:

Work Activity Description: This activity encompasses management activities (rather than maintenance work) required to protect project lands not covered under recreation areas or day-to-day facility maintenance. This work includes boundary surveys and fencing, aerial photography, responses to audits, maintenance of land records systems, administering crossing agreements, rights of use, permitting, etc.

Output: Project Land Managed	Unit of Measure: Acres of land managed. Acres of project lands managed that are not directly associated with management of facilities and facility grounds. The number of acres will most likely not change from year-to-year and can be used to track trends in costs.
Inputs: a) Labor, materials, contracts b) Standards, policies	Cost Drivers: Type of land, condition, extent of environmental issues, hazardous substances or invasive species.

System Interfaces:

DOI Work Activity 8J: Enhance Water Supply

Program Area:	Water and Power	
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner	
Intermediate Outcome Strategy:	UIO 5.2 - Effective Water Management to Optimize Supply	
DOI Sub process:	4d – Conserve resources	

Examples/Notes:

Work Activity Description: Developing and implementing measures to efficiently utilize water resources to produce/provide water to meet the range of needs of our water users to increase or maintain water supply to meet current or increasing demands. Includes activities related to water conservation, drought management, efficiency incentive efforts, water recycling and reuse, and water desalinization. Provide assistance to develop water management plans, modernize structures, automate operations, and demonstrate innovative technologies.

Output: Water Enhancement Efforts	Unit of Measure: Number of Water Enhancement Efforts Completed. Efforts include the number of construction, planning, implementation and assistance activities for the programs listed above (water conservation and planning, drought assistance, etc.) and other work/projects to improve water efficiency, modernize structures, automate operations, and demonstrate innovative technologies. Count the number of efforts completed in the reporting period
Inputs: a) Labor, travel, policy and guidance b) Congressional Requests, legislative mandates, regulatory requirements, identify range of needs for efficient utilization of water.	Cost Drivers: Cost of technology, cost of modernization, cost of automation, cost of technical assistance for planning

System Interfaces:

DOI Work Activity 8K: Implement Environmental Recommendations

Program Area:	Water and Power
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner
Intermediate Outcome Strategy:	UIO 5.3 – Address Environmental Resource Stewardship Concerns
DOI Sub process:	4d – Conserve resources

Examples/Notes:

Work Activity Description: The activity includes work associated with implementing recommendations to address ongoing operations and new species as specified in plans developed according to NEPA, ESA, CWA, other environmental and fish and wildlife laws and regulations, and National Historic Preservation Act (NHPA). Mitigation measures include such things such as fish screens, operational changes, structural modification etc. as required by BOs, RODs, Congressional directives, and other legal mandates; and development and design of recommendations. Proactive, partnership efforts are included.

Output: Environmental Recommendations	Unit of Measure: Number of Environmental Recommendations Implemented. Actions include all environmental review recommendations/mitigation measures implemented such as fish screens, operational changes, structural modification etc. as required by BOs, RODs, Congressional directives, and other legal mandates for the program activities listed above. Count the recommendation/mitigation measure in the reporting period that it is completed and put into place. For operational measures that are not "completed", but are continuous and implemented annually, count the measure once each year for every year it is implemented.
Definition:	
Inputs: a) Labor, water, data, b) Buyer/Seller requests, legislative mandates	Cost Drivers: Complexity of transfer, size of basin/region, Magnitude of environmental issues, number of interested parties, energy costs, extent of "real water"

System Interfaces:

DOI Work Activity 9C: Oversee/Administer Water Service Contracts

Program Area:	Water and Power
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner
Intermediate Outcome Strategy:	UIO 5.2 - Effective Water Management to Optimize Supply
DOI Sub process:	4e - Acquire or convey interests in land or water

Examples/Notes:

Work Activity Description: Includes all work necessary to monitor, review, administer, research, collect data, negotiate, develop, create and renew water service contracts, including all required NEPA activities and other assessments related to administering and renewing contracts.

Output: Water Service contracts administered	Unit of Measure: Number of Water Service contracts administered
Inputs: a) Labor and associated indirect costs, data b) Ongoing and expiring contracts	Cost Drivers: Water demands, extent of environmental issues, acceptability.

System Interfaces:

DOI Work Activity 9D: Provide Additional Water to Meet Various Needs

Program Area:	Water and Power
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner
Intermediate Outcome Strategy:	UIO 5.2 - Effective Water Management to Optimize Supply
DOI Sub process:	4e - Acquire or convey interests in land or water

Examples/Notes:

Work Activity Description: Provides water for availability to meet a range of needs (use, timing, and amount). Water banking includes water storage, water transfers, water purchases, ground water recharge and water leasing for various uses by Reclamation and/or other users to optimize supply.

Output: Additional water made available	Unit of Measure: Acre-feet of water provided. Includes additional acre-feet made available through water banking, water transfers, water purchases, ground water recharge and water leasing for purposes other then those funded with A30. The acre-feet is obtained from contracts and agreements
Inputs: a) Labor, travel, policy and guidance b) State regulations, water user requests and initiatives, financial/technical assistance	Cost Drivers: Cost of technology, geographic locations, contract negotiations, # of water user entities, cost of technical assistance

System Interfaces:

DOI Work Activity G7: Assess Resource Use Impacts

Program Area:	Water and Power
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner
Intermediate Outcome Strategy:	UIO 5.3 – Address Environmental Resource Stewardship Concerns
DOI Sub process:	1a – Collect data

Examples/Notes:

Work Activity Description: Work under this activity includes development of various environmental documents including EIS, EAs, and BAs, and Section 7 consultations that pertain to ongoing operations and/or new species listings and not new development. Generally this activity captures work triggered by other laws, regulations or standards.

Output: Assessments	Unit of Measure: Number of assessments completed. Count the number of assessment completed during the reporting period. Assessments include consultations, EAs, BAs, and monitoring studies. This does not include FWS activities for species listings
Inputs: a) Labor b) Law or regulation, law suit, preventative management	Cost Drivers: Complexity/magnitude of environmental issues, number of interested parties, data availability.

System Interfaces:

DOI Work Activity N5: Conduct Water Resource Development Studies

Program Area:	Water and Power
End Outcome Goal:	UEO 5 - Deliver Water, Consistent with Applicable State and Federal Law, in an Environmentally Responsible and Cost-Efficient Manner
Intermediate Outcome Strategy:	UIO.5.4 - Complete Construction Projects to Increase Delivery Infrastructure and Water Supply
DOI Sub process:	1b – Create information from data

Examples/Notes:

Work Activity Description: Conduct water development feasibility studies to determine beneficial use (unmet needs) and provide information on the feasibility, alternatives and cost of proposed projects. Work under this activity includes gathering and evaluating data on resource demands, potential users of water, and developing a gap analysis or needs assessment; feasibility studies, NEPA documents; conducting public outreach; data analysis; modeling; document preparation; and developing and tracking contracts and grants.

Output: Water development reports/decision documents	Unit of Measure: Number of Water Development Reports Completed. A development report is equivalent to Reclamation's feasibility and/or appraisal studies directly related to proposed construction projects. This counts any current/ongoing feasibility studies
Inputs: a) Labor, including indirect costs, transportation, data, b) Congressional Requests, legislative mandates, needs assessments, customer requests	Cost Drivers: NEPA requirements, complexity, accessibility to alternative sites, politics, stakeholder involvement and support, acceptability of the project, and level of cost-share

System Interfaces: